

Figure 1

* Platform 42 is attached to, joins, and covers both moving blocks 92 and 95. Platform 42 joins, spans, and covers points A, B, C, and D. Platform 42 does not make contact with support 30C, or with shafts 40.

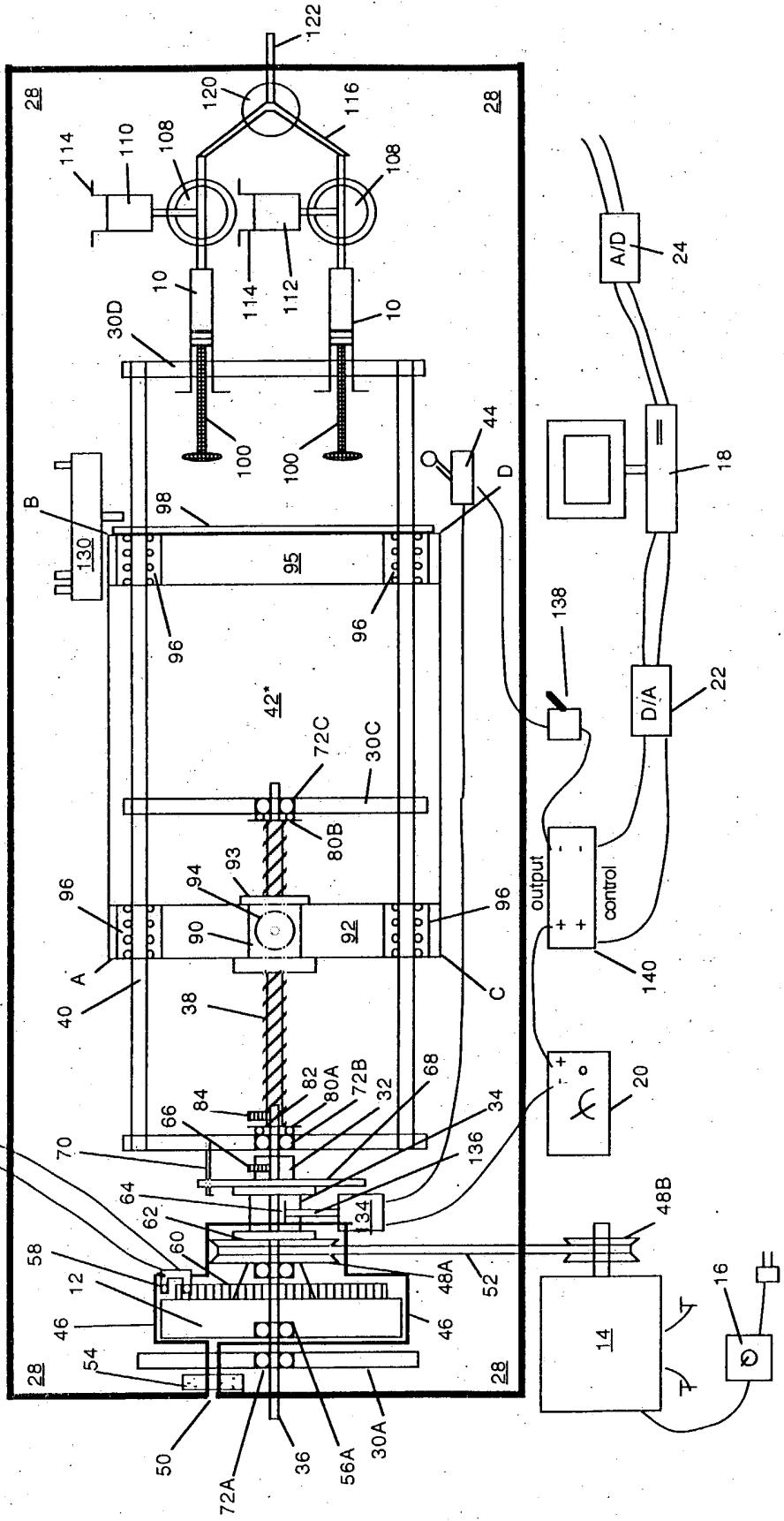
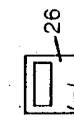


Figure 2:
Syringe - valve -
mixer - detector,
solution flow
system

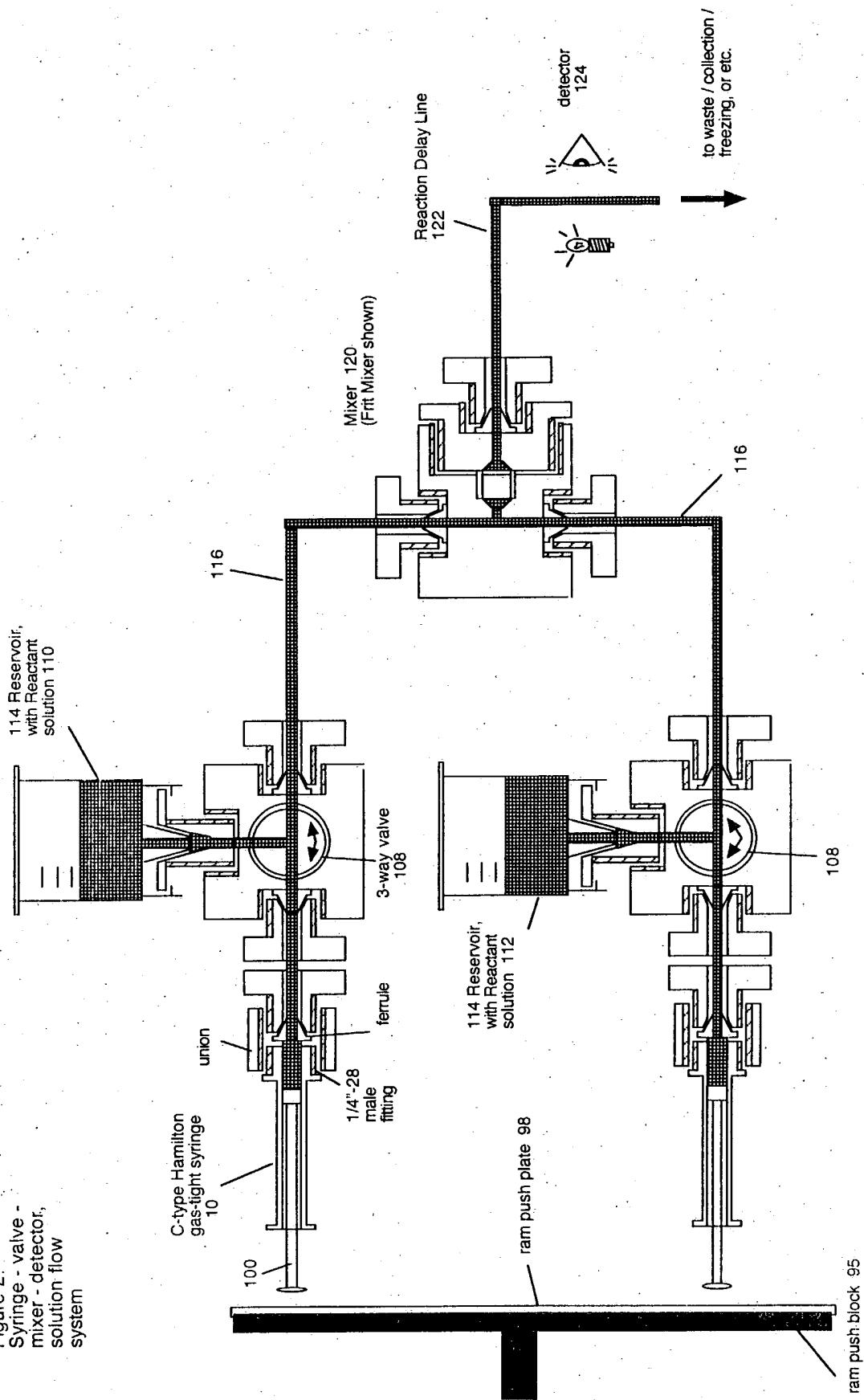


Figure 3:

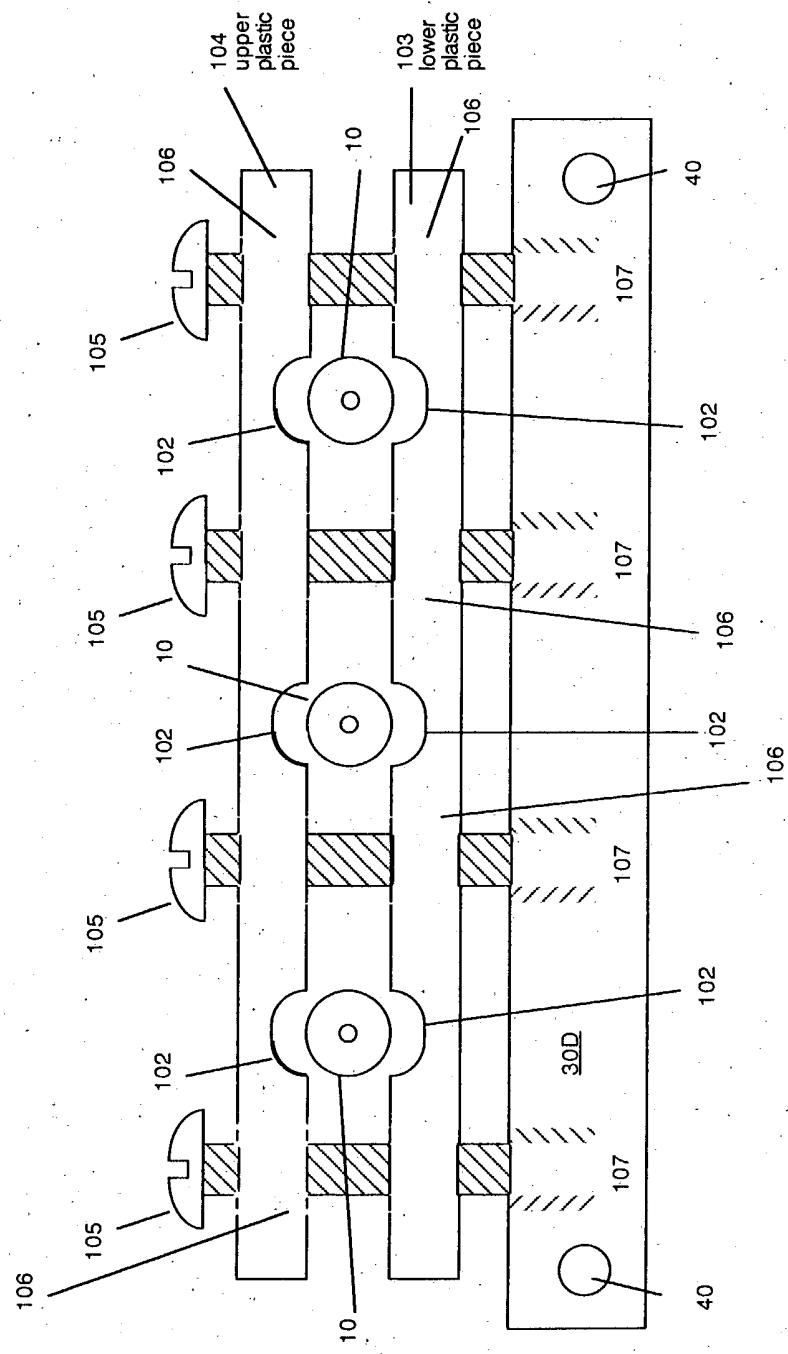


Figure 4A:

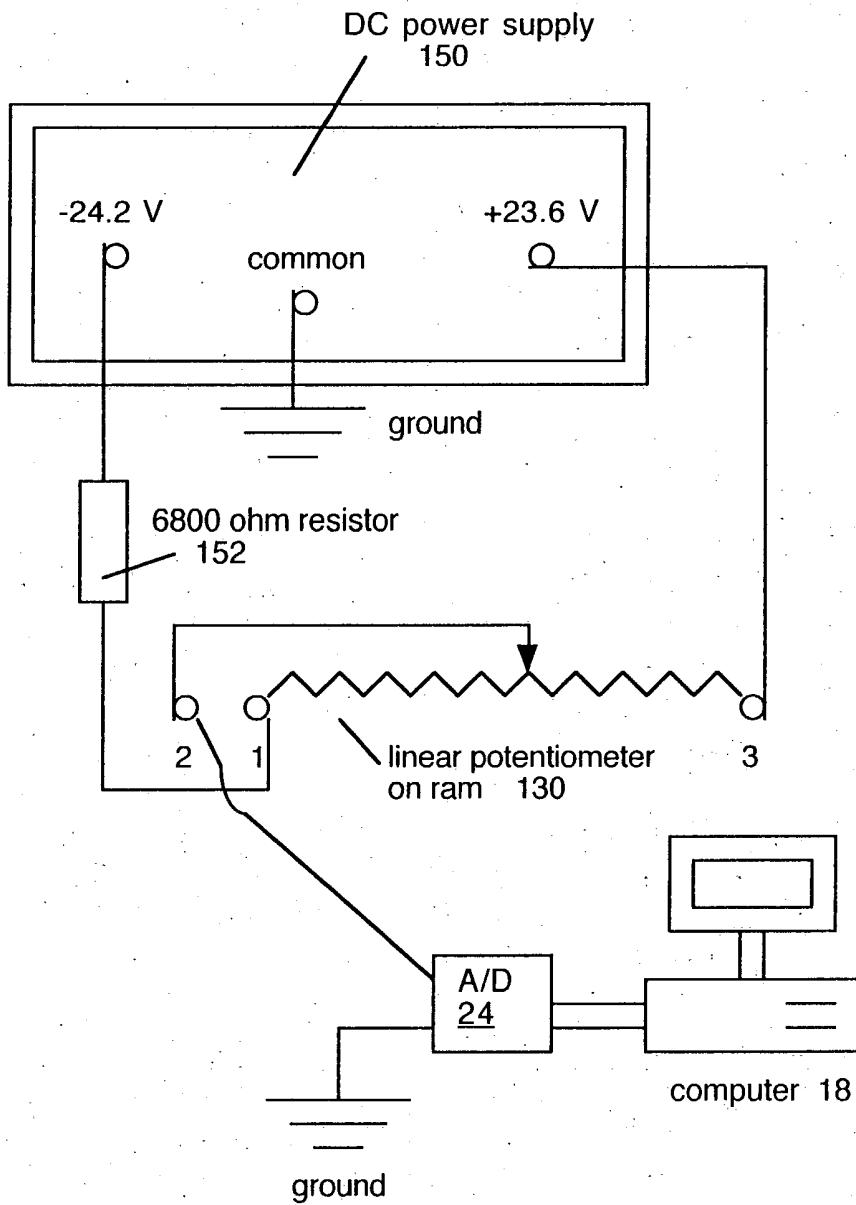


Figure 4B:

Five, 6-volt, lead-acid, sealed, rechargeable batteries
154

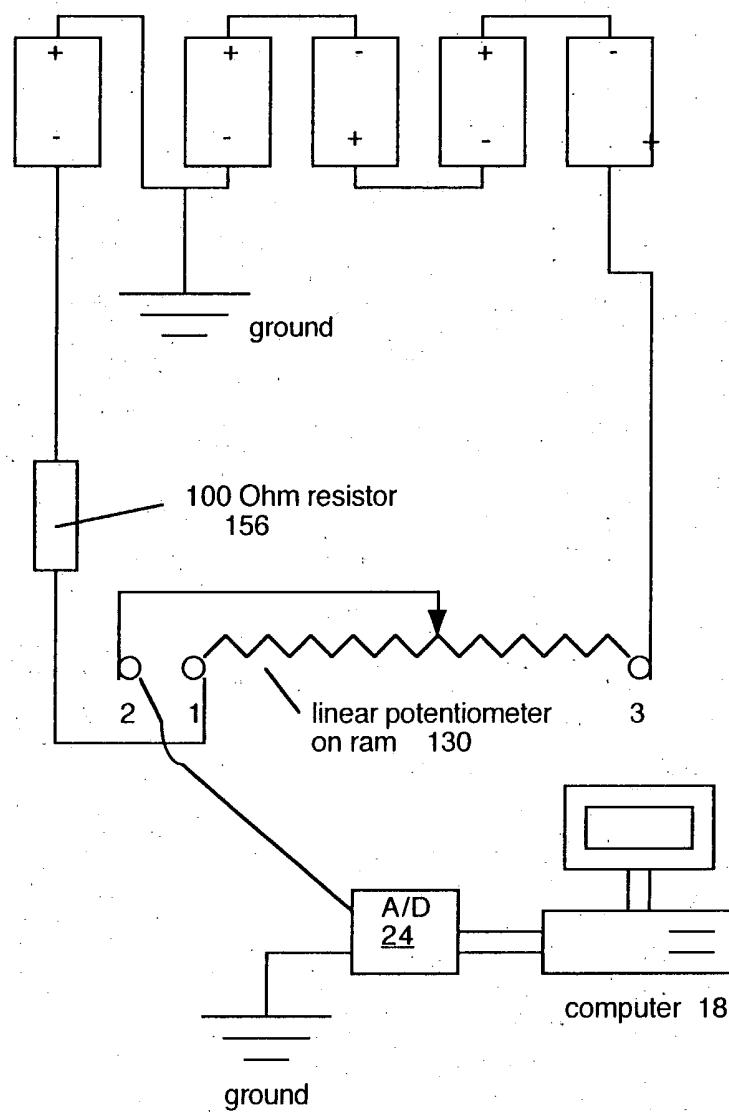


Figure 5:

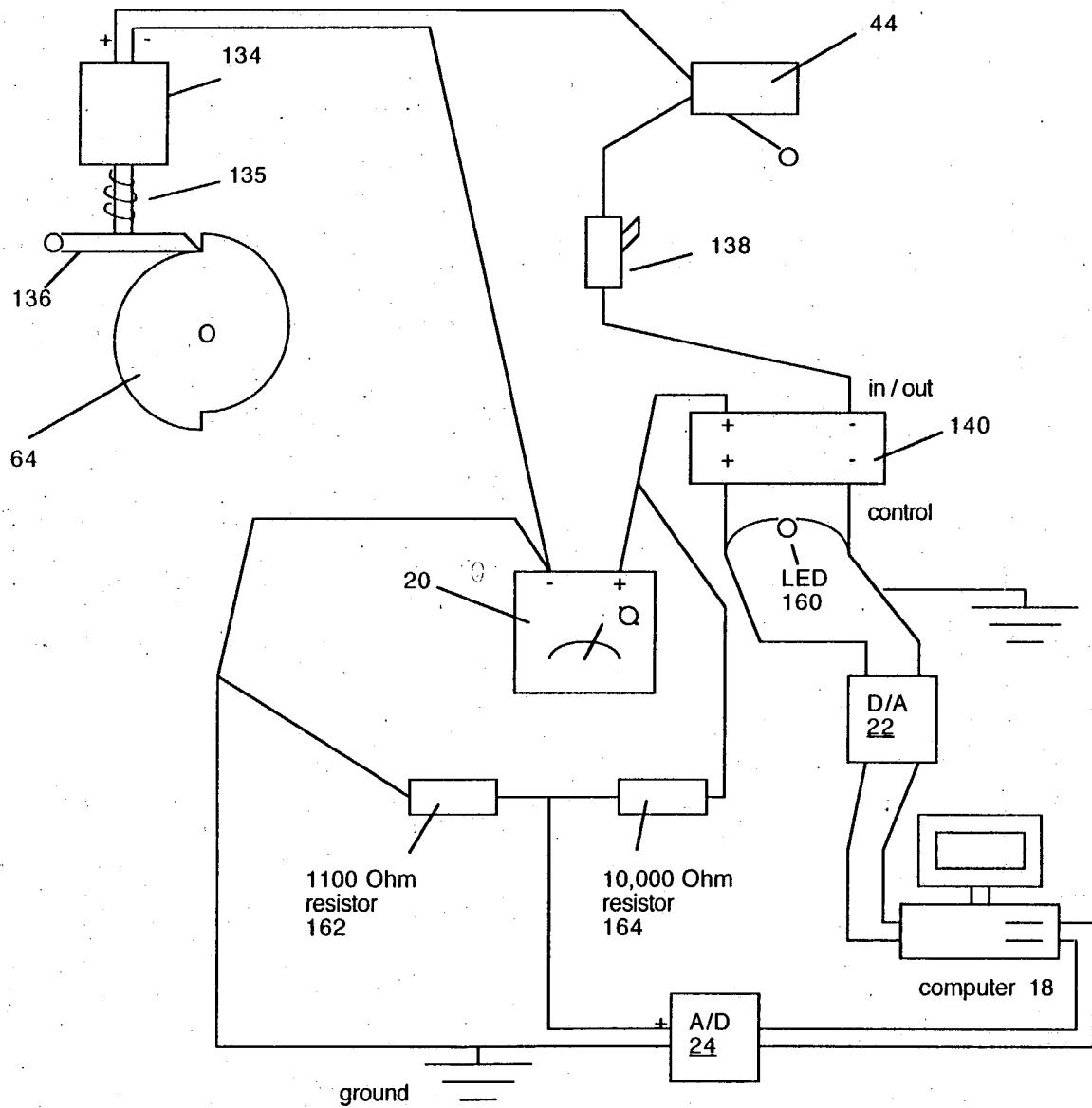


Figure 6:

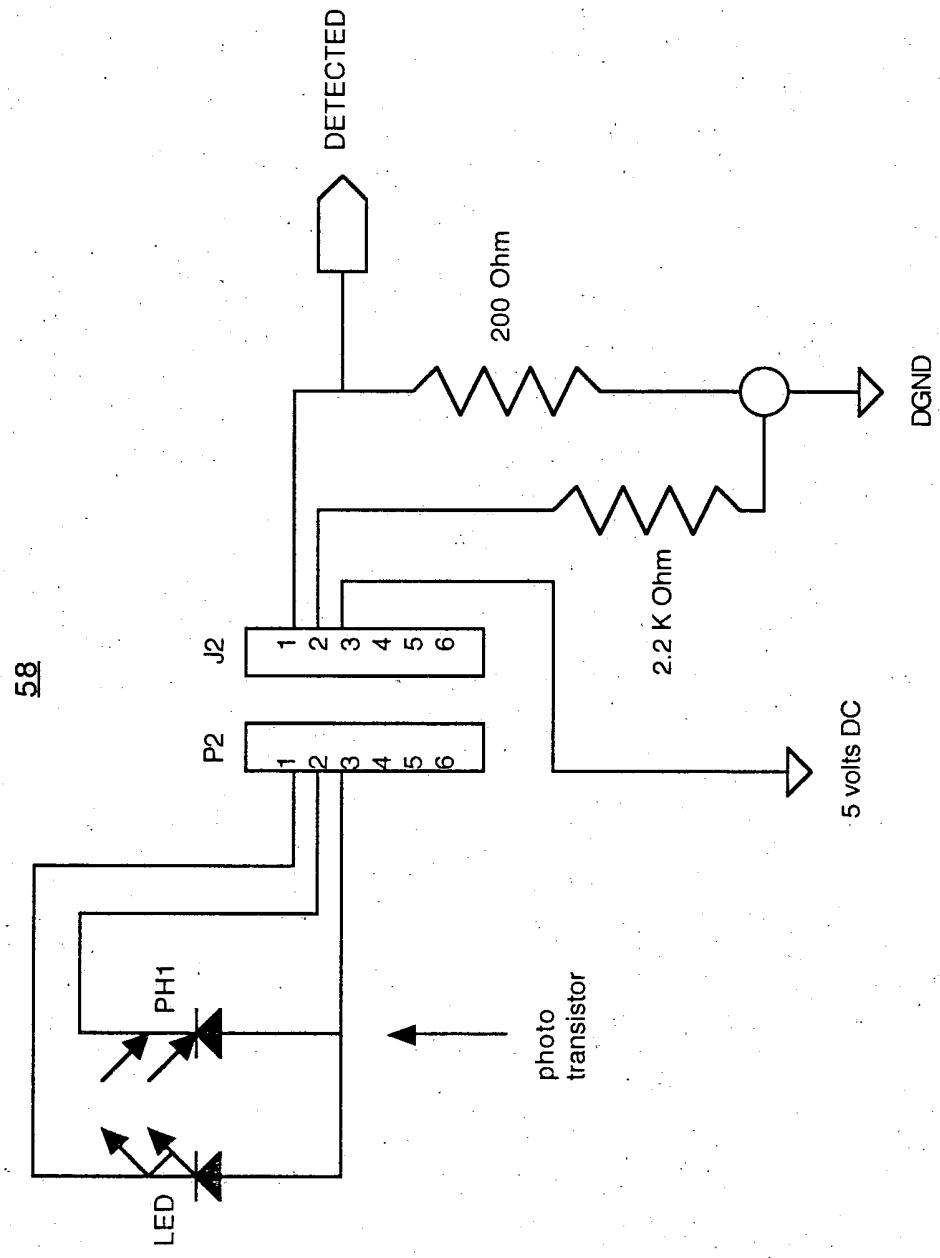
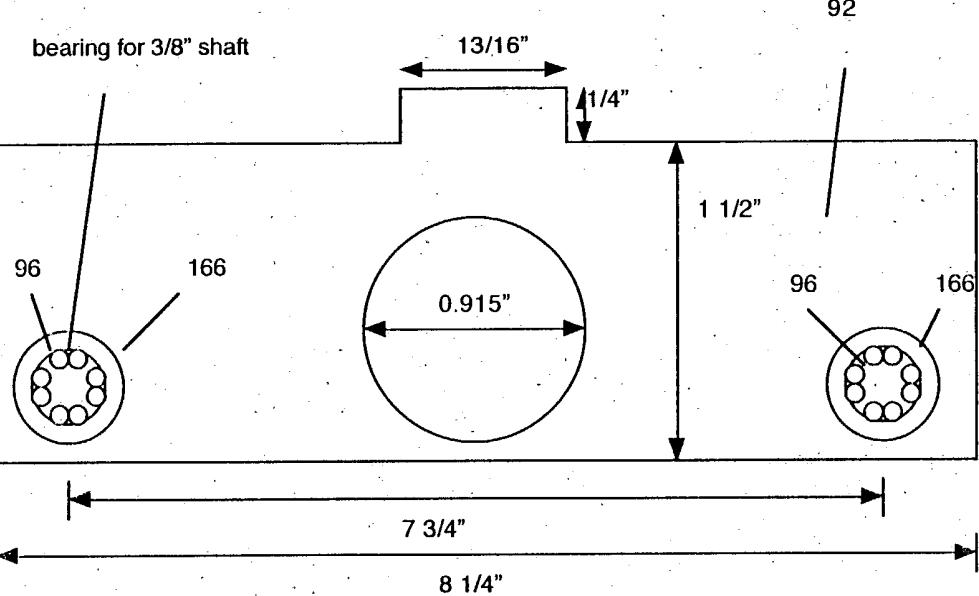


Figure 7:

7A. Rear Moving Block - Viewed from front or rear



7B. Rear Moving Block - as viewed from top

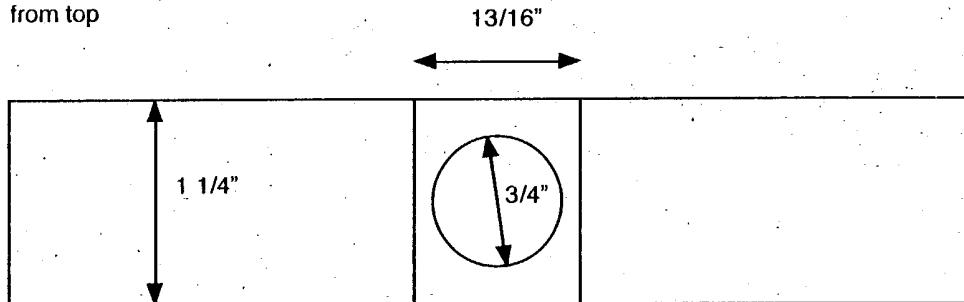
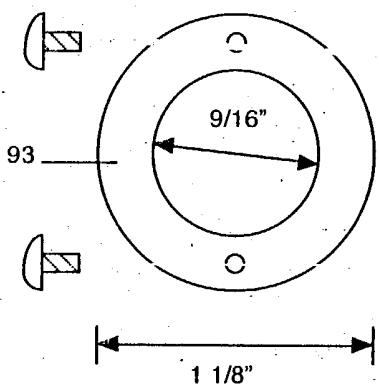
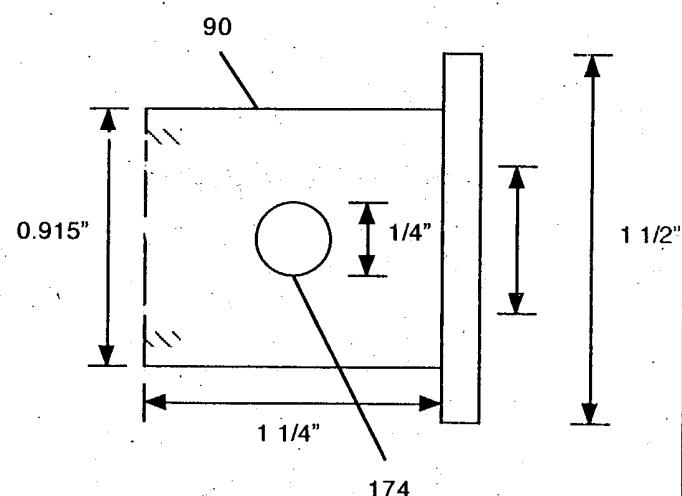


Figure 7, continued:

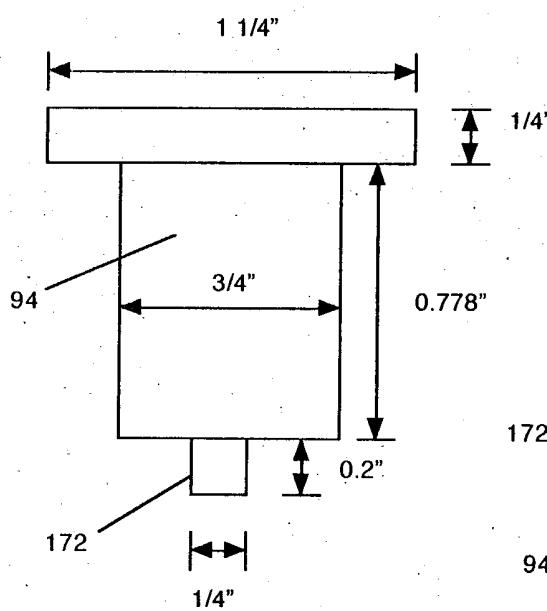
7C. Brass front end
piece - 1/8" thick



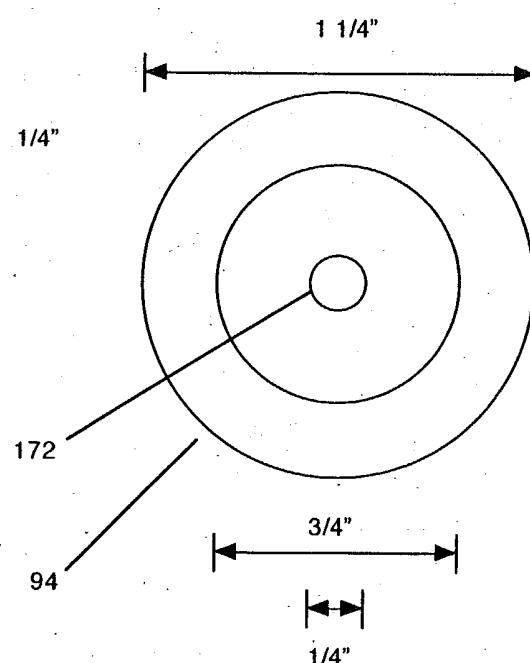
7D. Threaded
Brass Nut



7E. Removable
Brass Locking Pin



view from side



view from bottom

Figure 8:

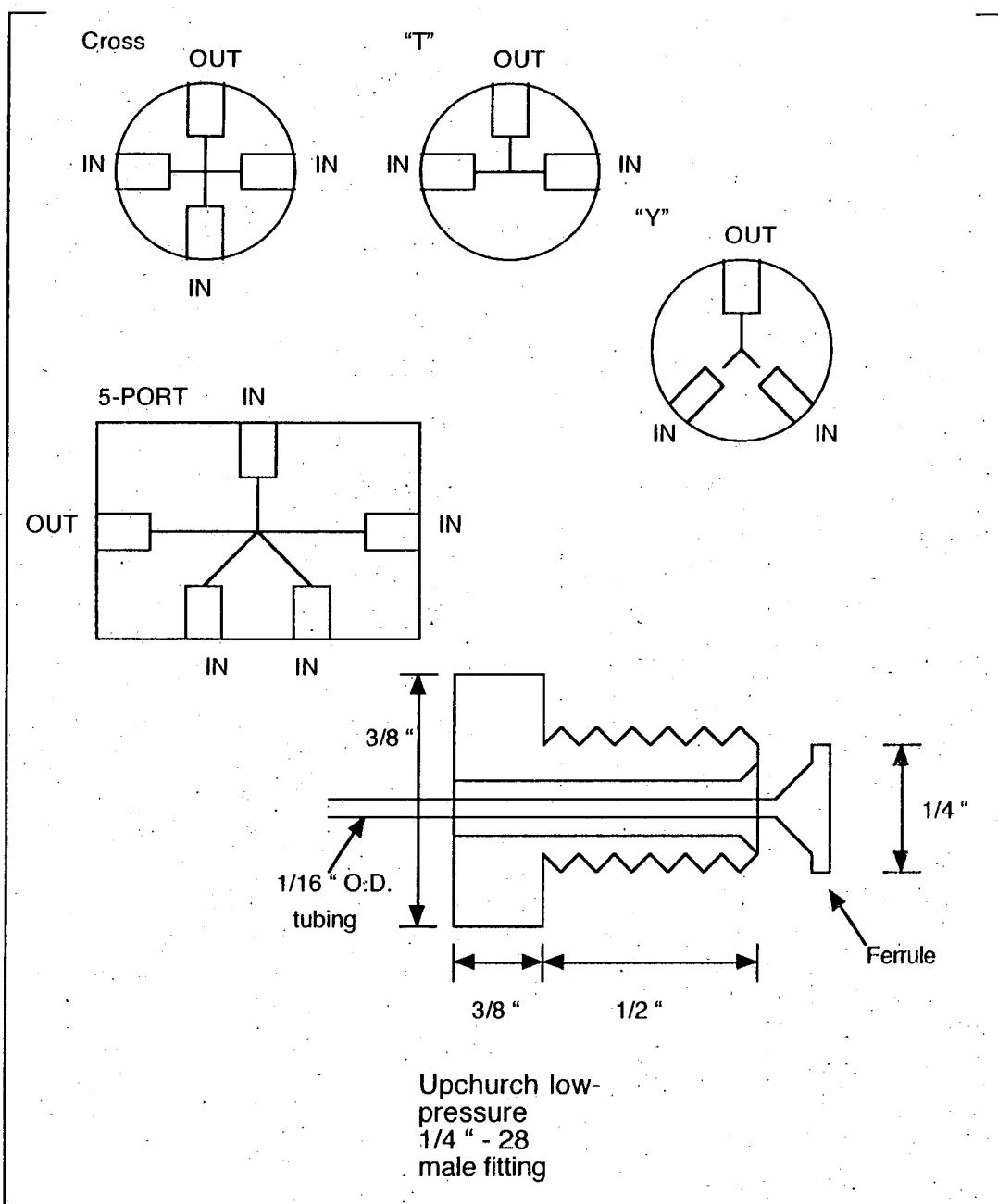


Figure 9A:

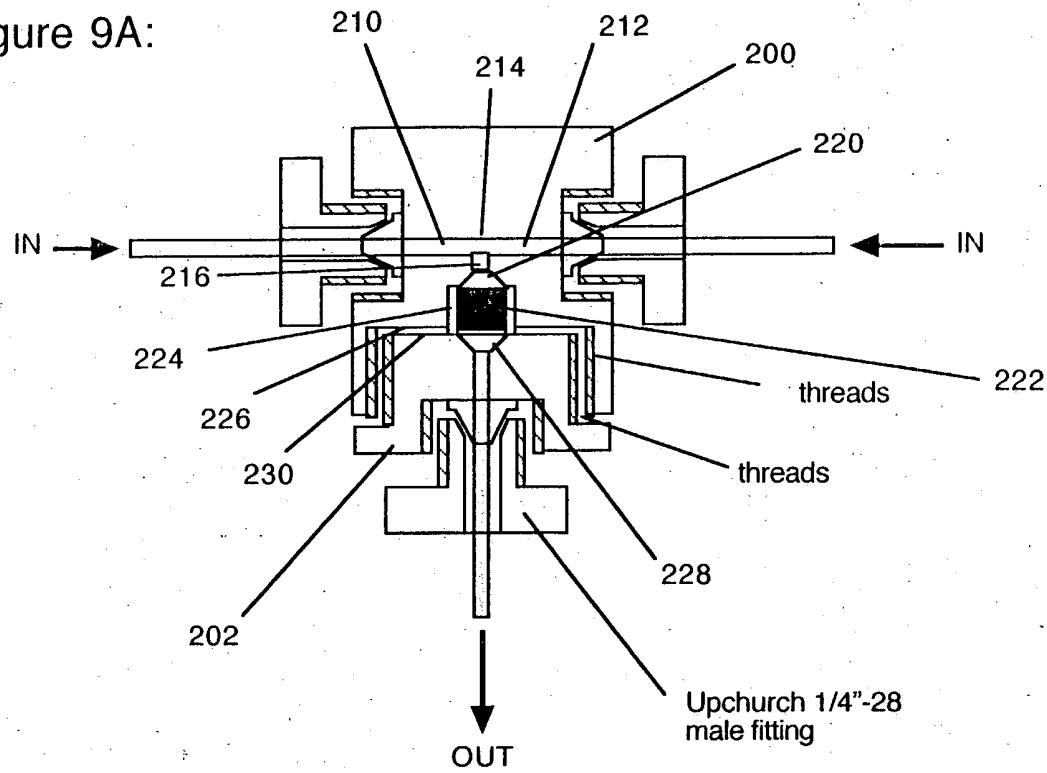


Figure 9B:

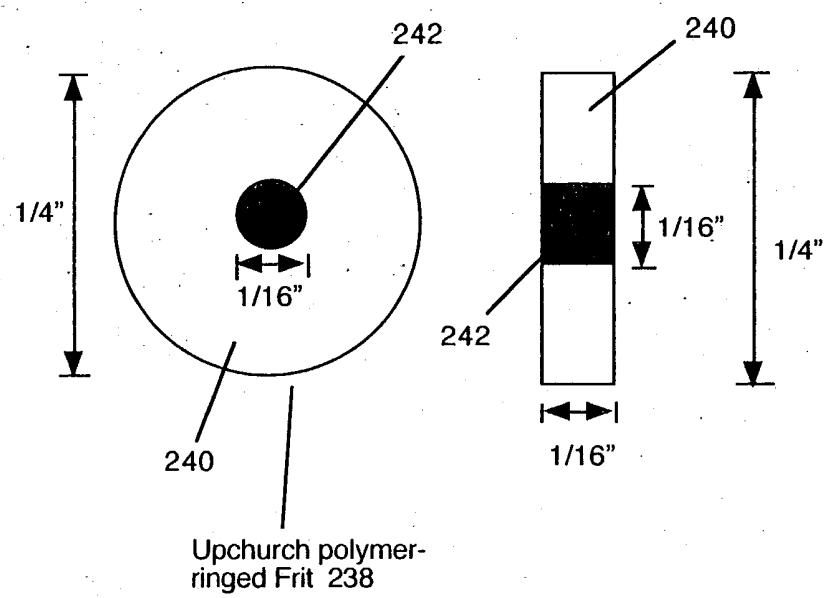


Figure 9B,
continued:

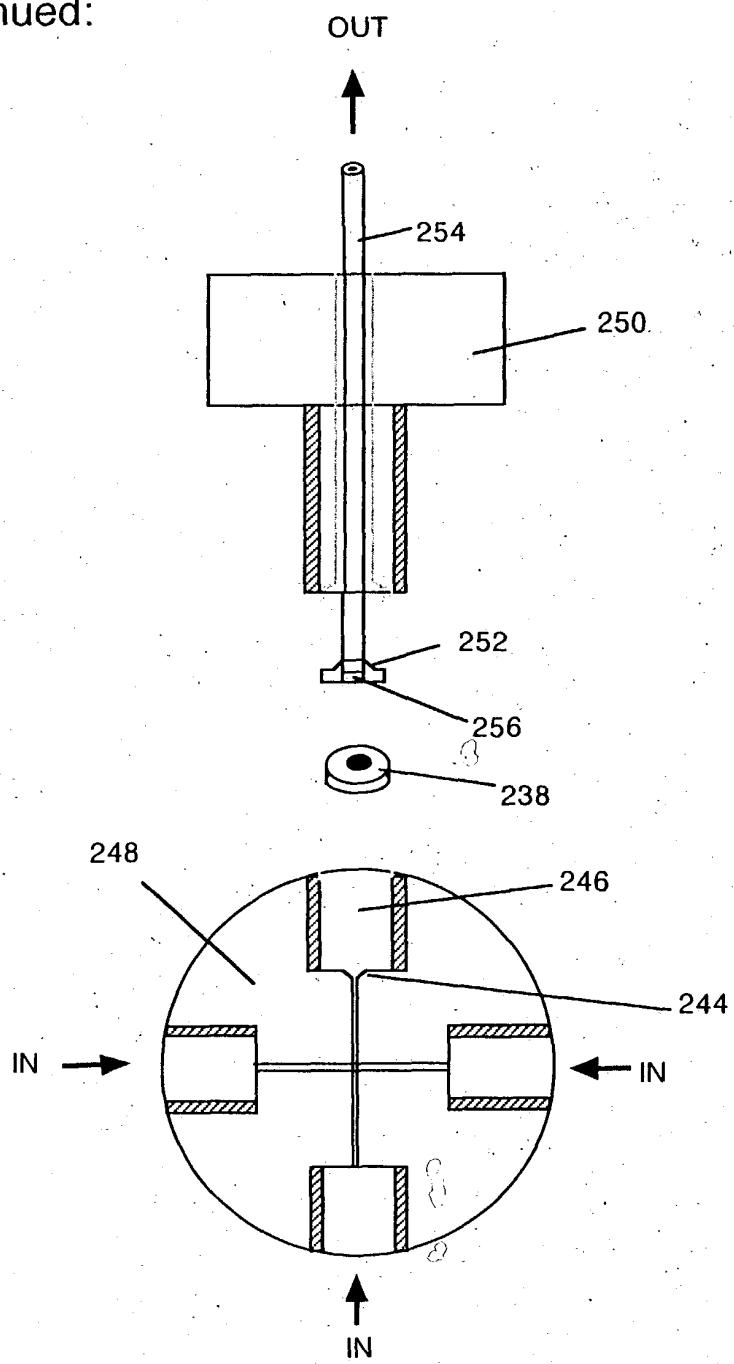


Figure 10:

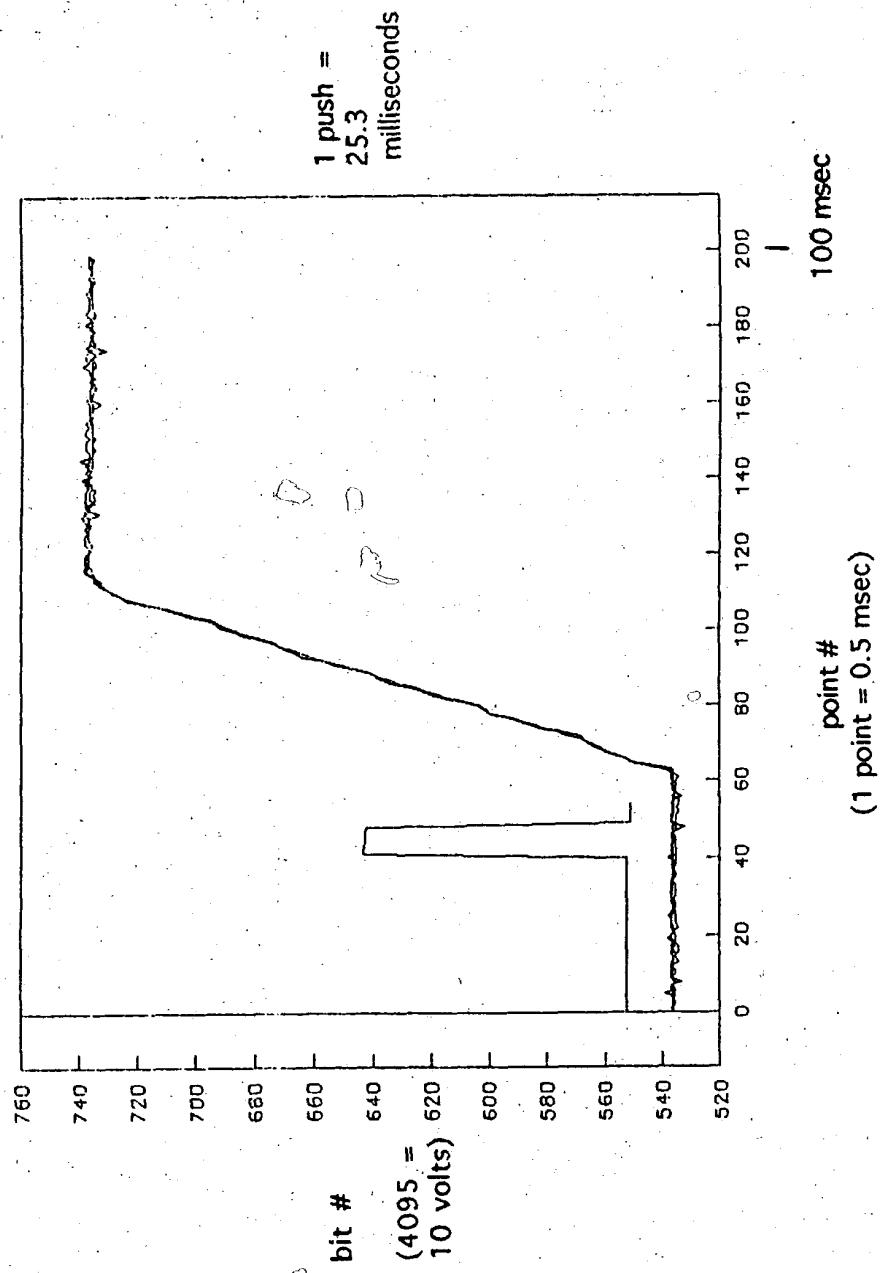


Figure 11:

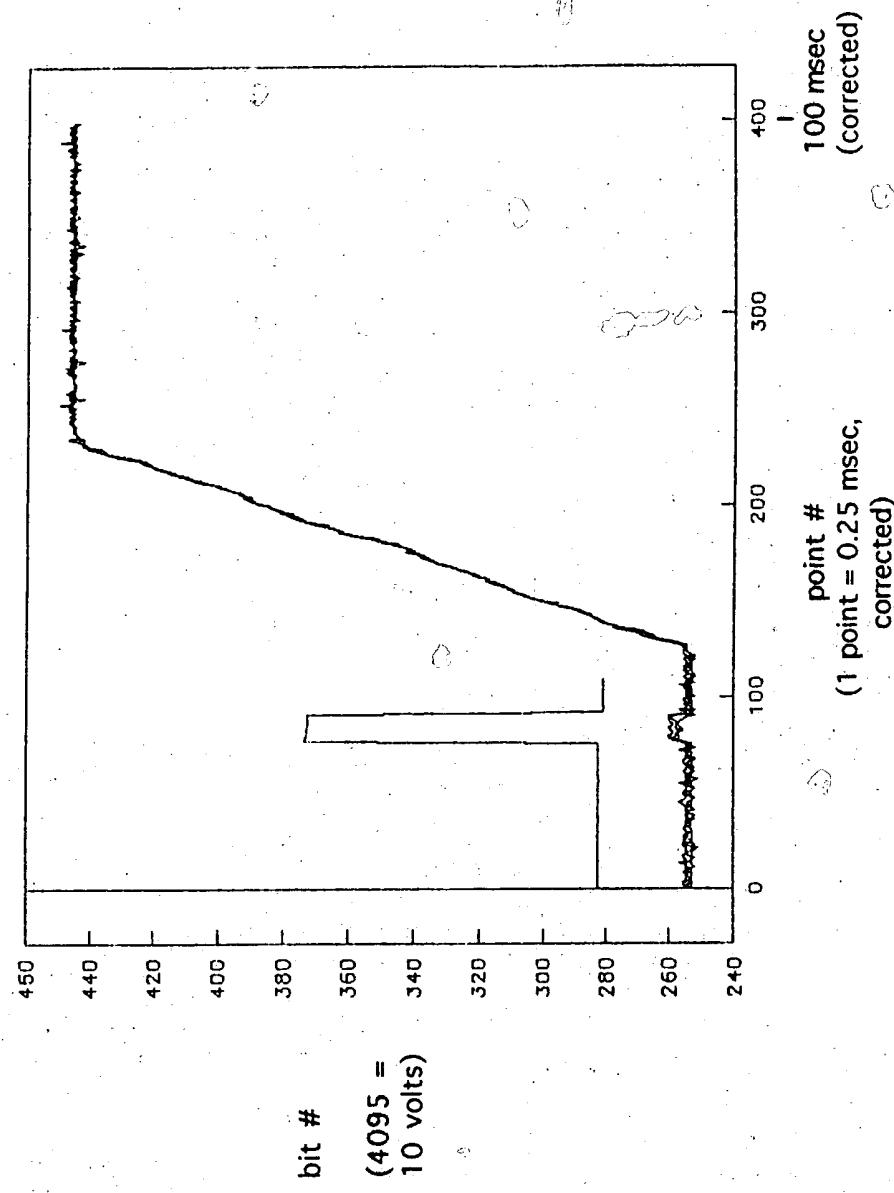
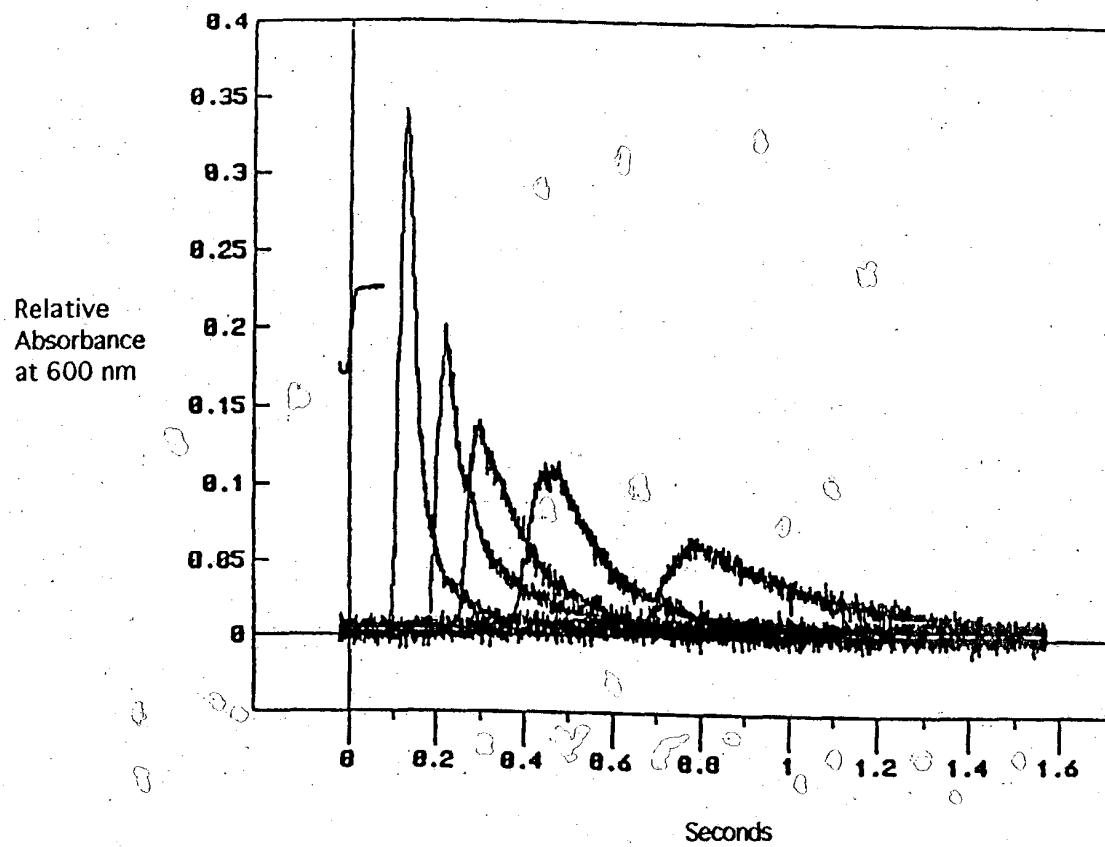


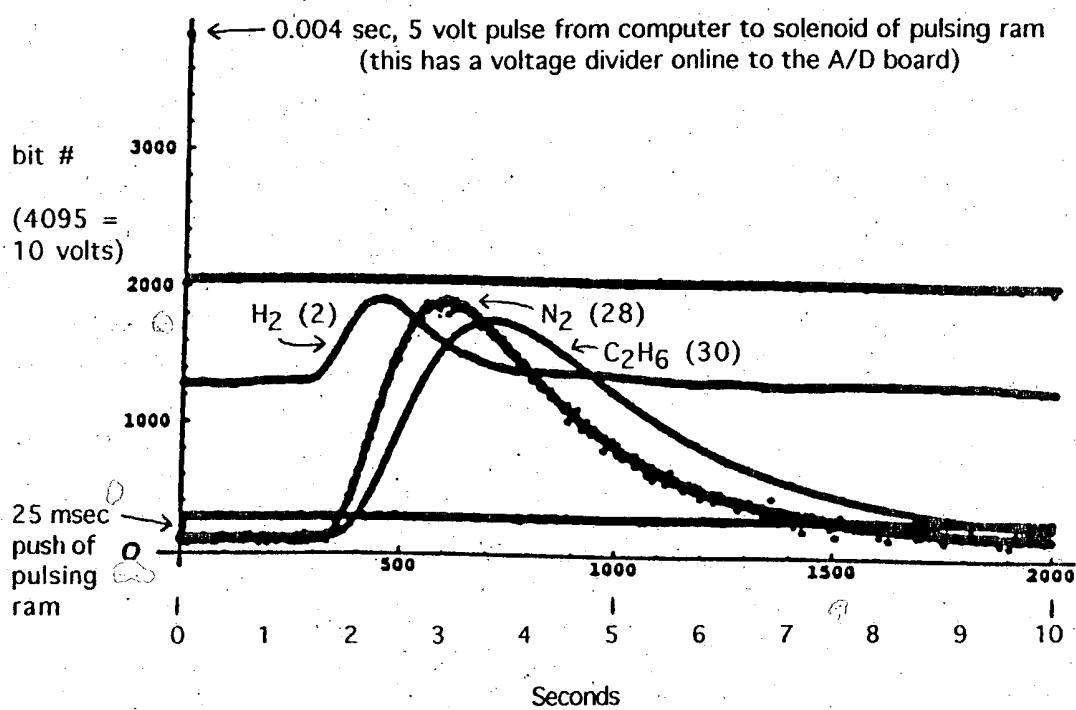
Figure 12:



Conditions:

- 1) Continuous laminar flow of carrier stream, Reynolds number (Re) = 821.
- 2) 0.025 second, pulse-injection of dye, centered at time zero.
- 3) Dye is bromphenol blue + HCO_3^- in water.
- 4) Reaction delay lines are 0.020" (0.5 mm) i.d., and of variable lengths.

Figure 13:



Conditions:

Enzyme syringe: H₂O equilibrated (vol/vol) with 93% N₂, 5% H₂, 2% C₂H₆.

Total pressure = 3.7 atm.

Substrate syringe: omitted.

Carrier: (Argon-sparged H₂O. (No check valve in system.)

Reaction delay line: 2 meters long, 1.7 sec long, 0.022" i.d., 1/16" o.d., nylon.

Single pulse of ram.

Sampling mass 2; mass 28, mnass 30, all at 5 msec intervals.

Sampling computer output and ram displacement at 1 msec intervals.

Monitoring Five Channels Concurrently:

- 1. mass 2 (H₂)
- 2. Mass 28 (N₂)
- 3. Mass 30 (C₂H₆)
- 4. Computer output pulse to relay of ram.
- 5. Ram displacement.

Figure 1.4:

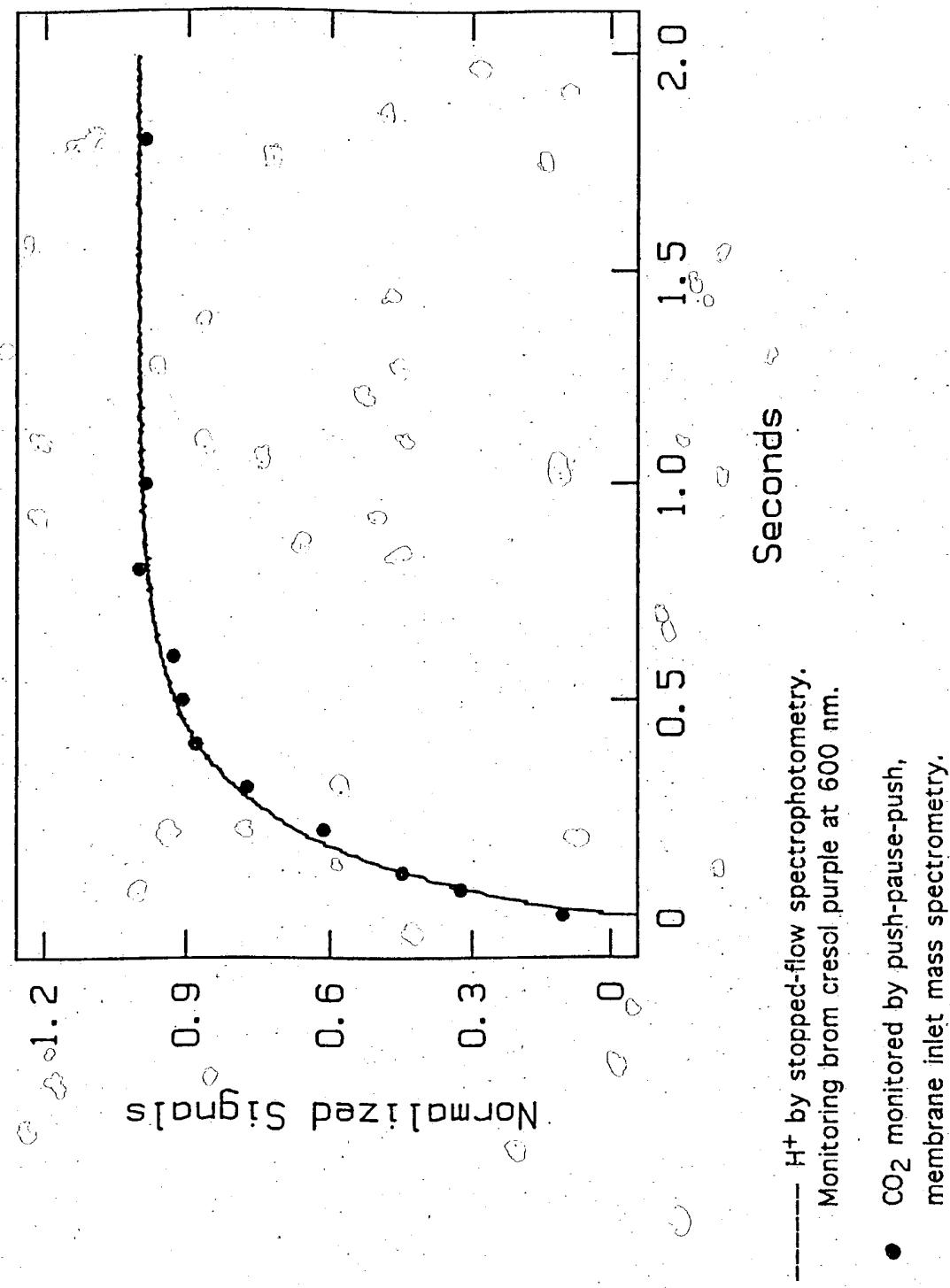


Figure 15:

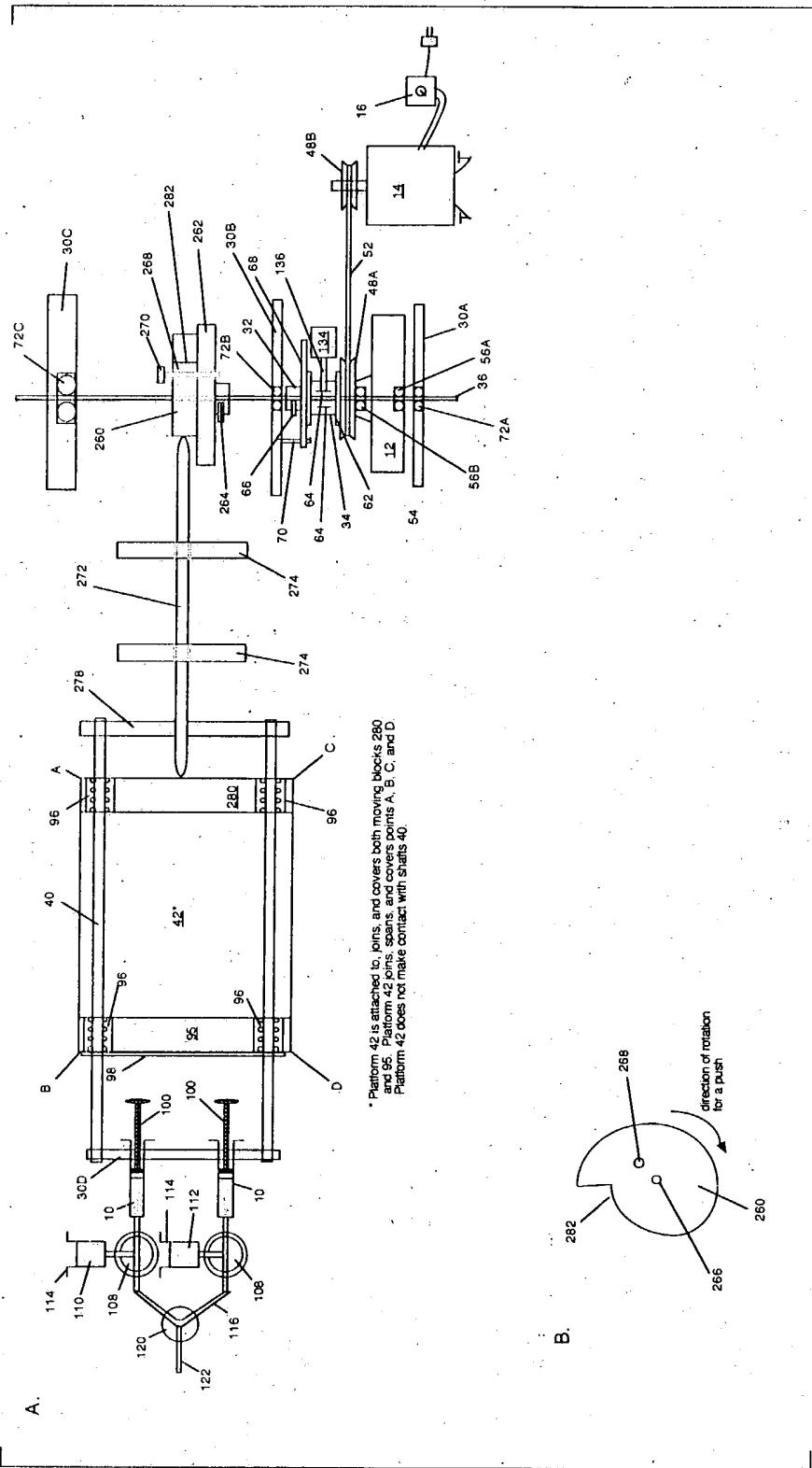


Figure 16A:

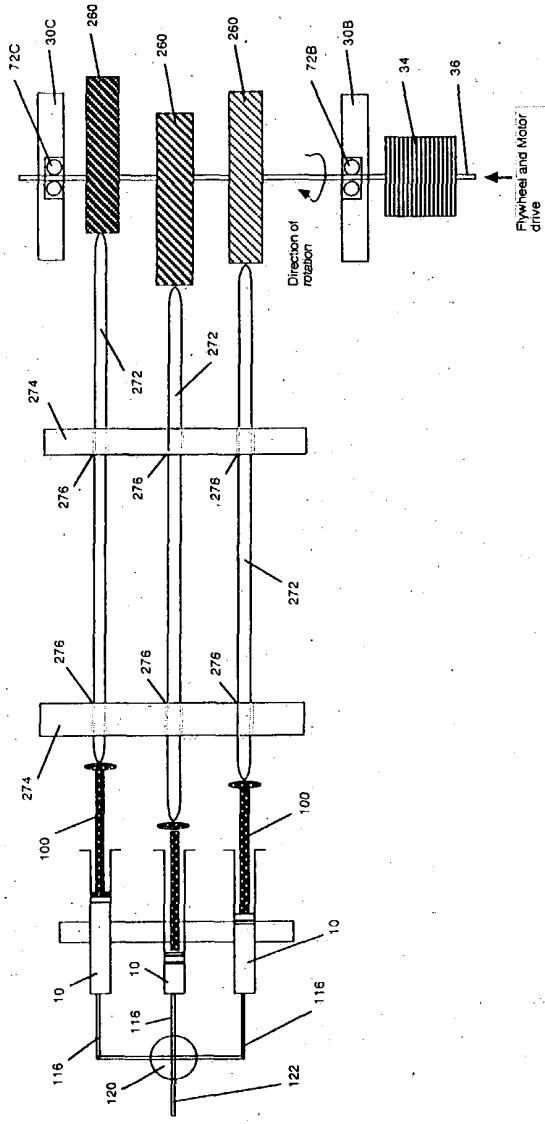


Figure 16B:

